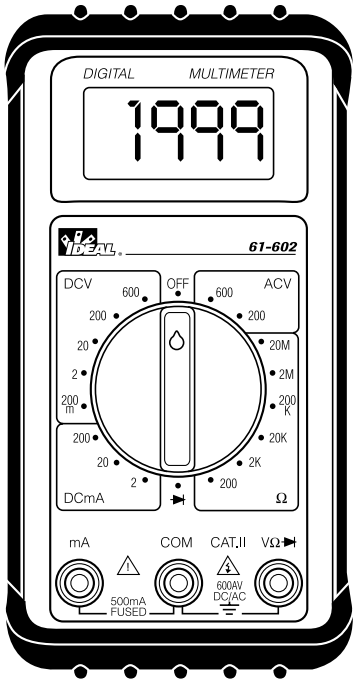
#61-602

Model 602 Digital Multimeter Operating Instructions



IMPORTANT SAFETY INFORMATION

Read and **understand** all of the instructions and safety information in these operating instructions before using this meter.

The ⚠ indicates hazards that could result in personal injury or property damage.

A ⚠ **WARNING** statement identifies hazardous conditions and actions that could cause bodily harm or death.

A ⚠ **CAUTION** statement identifies conditions that could damage the meter or equipment under test.

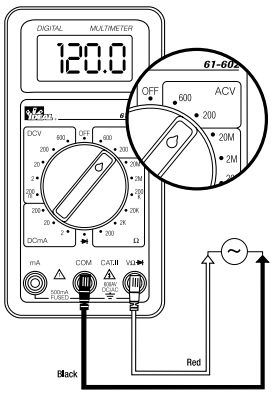
⚠ **WARNINGS**

- **Use this meter only as specified in this manual.**
- **Do not use meter if operating improperly.**
- **Inspect test leads before each use for good insulation. Do not use if suspect.**
- **Take care to use the proper switch position and lead inputs for measurements.**
- **Verify the meter operation on a known voltage source.**
- **Use caution with voltages above 30 Volts as they pose a shock hazard.**
- **Never exceed the electrical ratings on the meter or in this manual.**
- **Never ground yourself when taking measurements.**
- **Do not use the meter around explosive gas or vapor.**
- **Do not use during electrical storms.**
- **Keep your fingers behind the finger guards on the test leads.**
- **Turn off power before disconnecting a circuit for measurement.**
- **Always use proper Personal Protective Equipment when taking measurements.**

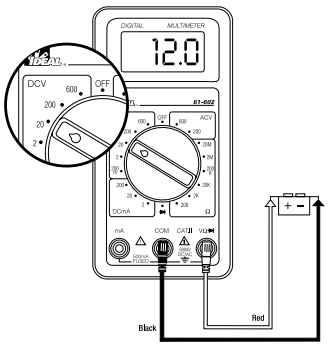
Symbols

⚠	Risk of electric shock
⚠	See instruction card
⎓	DC measurement
⧈	Equipment protected by double or reinforced insulation
+−	Battery
⏚	Earth
~	AC measurement
CE	Conforms to EU directives

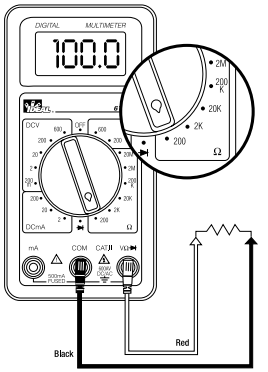
AC Voltage (V~)



DC Voltage (V⎓)

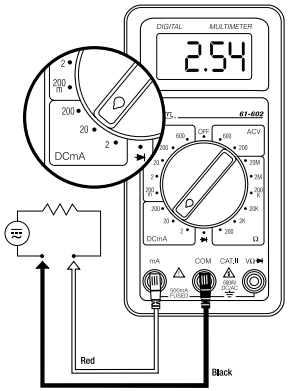


Resistance (Ω)



⚠ **CAUTION: De-energize circuit before taking resistance measurements.**

DC Current (A⎓)



Turn power off, break circuit, insert meter in series, then turn power back on.

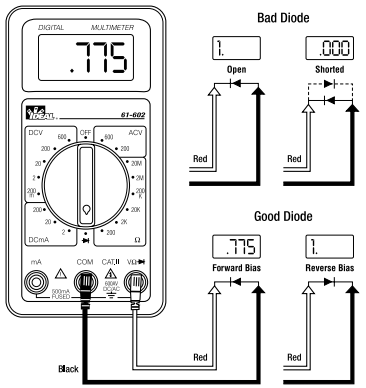
⚠ **WARNING:**

- **Check fuse before testing.**
- **Use the proper switch position and lead inputs.**
- **Never attempt to measure current on circuits or equipment with more than 200mA or 250 volts potential.**

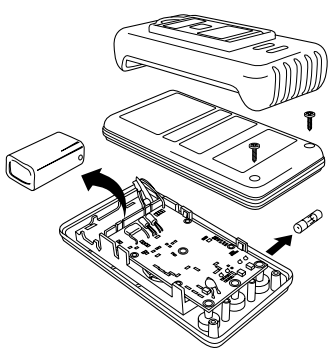
Test Equipment Depot
1-800-517-8431

99 Washington Street
Melrose, MA 02176
Fax 781-665-0780
TestEquipmentDepot.com

Diode Testing



Battery & Fuse Replacement



Battery: Part B-4; 9V Alkaline
NEDA 1604/IEC 6LR61

Fuse: Part F-7; 0.5A, 250V,
5x20mm, fast acting

⚠ **WARNING:** TO AVOID ELECTRIC SHOCK DISCONNECT MEASURING TERMINALS BEFORE REMOVING BATTERY COVER.

⚠ **CAUTION:** FOR CONTINUED PROTECTION AGAINST FIRE, REPLACE ONLY WITH FUSE OF THE SPECIFIED VOLTAGE, CURRENT AND RUPTURE SPEED RATINGS

Specifications

Display: 3-1/2 digit LCD, 0.625" numerals, maximum reading 1999 with automatic sign.

Overange Indication: "1" most significant digit displayed

Sampling Rate: 3 times per second

Operating Environment: 0° to 50°C (32° to 122°F), max RH 80% to 31°C decreasing linear to 50% RH at 40°C

Storage Environment: -20° to 60°C (-4° to 140°F) at <80% relative humidity

Battery Life: 200 hours typical with zinc carbon

Safety Compliance: IEC 61010-1 Cat II - 600V

Dimensions: 5.6"H x 3.1"W x 1.3"D (143 x 79 x 33mm)

Weight: Approximately 5.6 oz. (160g) including battery

□ **Equipment protected by double insulation.**

Instrument complies with overvoltage category II. Cat II equipment protected from transients in outlets and long branch equipment. Pollution degree 2 in accordance with IEC-664. Altitude up to 2000M. Indoor use.

c UL us **Cat II-600V** CE N12966

Ranges

	Ranges & Resolution	Basic Accuracy	Input Impedance	Overload Protection
AC Voltage	200.0/600V	2.5%	10 M OHM	1100 VDC or peak AC for 1 min
DC Voltage	200.0mV/2.000/20.00 200.0/600V	2%	10 M OHM	1100 VDC or peak AC for 1 min
Resistance	200.0/2.000k/20.00k 200.0k/2.000M/20.00MΩ	1.5%	—	500VDC or AC rms Electronic
DC Current	2.000m/20.00m/200.0mA	1%	350 mV max	0.5A/250V Fuse mA input

Maintenance

Do not attempt to repair this meter. It contains no user-serviceable parts. Repair or serving should only be performed by qualified personnel.

Cleaning

Periodically wipe the case with a dry cloth and detergent . Do not use abrasives or solvents.

LIFETIME LIMITED WARRANTY

This meter is warranted to the original purchaser against defects in material or workmanship. During the warranty period, IDEAL INDUSTRIES, INC. will, at its option, replace or repair the defective unit, subject to verification of the defect or malfunction.

This warranty does not apply to defects resulting from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the instrument.

Any implied warranties arising out of the sale of an IDEAL product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. The manufacturer shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expenses, or economic loss.

State laws vary, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Test Equipment Depot - 800.517.8431 - 99 Washington Street Melrose, MA 02176

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